IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Ashkenazi et al.

Serial No: 09/978,191

Filed: October 15, 2001

Attorney's Docket No: 39780-2630P1C4

Group Art Unit: 1647

Examiner: O Hara, Eileen B

For: **SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC ACIDS ENCODING THE SAME**

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

DECLARATION OF AUDREY GODDARD, Ph.D., PAUL J. GODOWSKI, Ph.D., AUSTIN GURNEY, Ph.D., and WILLIAM I. WOOD, Ph.D. UNDER 37 CFR 1.131

We, Audrey Goddard, Ph.D., Paul J. Godowski, Ph.D., Austin Gurney, Ph.D., and William I. Wood, Ph.D. do hereby declare and say as follows:

1. We are the inventors of the above-identified application.

2. We have read and understood the claims pending in this application, and are aware that the claims have been rejected as anticipated by Holtzman *et al.*, U.S. Published Patent Application 20020028508, with effective priority date April 23, 1998 (09/065,363), and Sheppard *et al.*, U.S. Published Patent Application 20020028508, with effective priority date June 18, 1997 (09/050,143)

3. We conceived and reduced to practice the polypeptide comprising an amino acid sequence of residues 35-273 of SEQ ID NO:506 claimed in the above-identified application in the United States prior to June 18, 1997.

4. At the time the above polypeptide was cloned and sequenced, one of the inventors, Austin Gurney, was responsible for overseeing the cloning of cDNAs which encoded novel polypeptides, including the cDNA encoding the polypeptide comprising an amino acid sequence of residues 35-273 of SEQ ID NO:506.

5. At the time the above polypeptide was cloned and sequenced, one of the inventors, Audrey Goddard, was, and still is, responsible for overseeing the sequencing of nucleotides encoding novel polypeptides, including the polypeptide having an amino acid sequence of residues 35-273 of SEQ ID NO: 506 as claimed in the above-identified application.

6. At the time the nucleotide encoding the above polypeptide was cloned and sequenced, one of the inventors, William I. Wood, was, and still is, responsible for overseeing the homology searches for novel polypeptides, including that for the polypeptide having an amino acid sequence of residues 35-273 of SEQ ID NO: 506 as claimed in the above-identified application.

7. A cDNA clone, referred to as DNA30943-1163 in the above-identified application, was identified as encoding the claimed polypeptide.

8. The full length sequence of the cDNA clone, DNA30943-1163, is shown in Figure 1 of the above-identified application. The amino acid sequence of the claimed polypeptide is shown in Figure 213 (residue 35-273 of SEQ ID NO: 506). The cDNA sequence encoding the claimed polypeptide has 722 nucleotide residues and is shown in Figure 212 (nucleotides 500-1222 of SEQ ID NO: 505) of the above-identified application. The claimed polypeptide has 238 amino acid residues, and is only slightly different from PRO213 at the N-terminal. That portion of PRO213, which overlaps with the claimed polypeptide of the above-identified application, is significantly homologous with the human growth arrest-specific 6 (gas6) protein.

9. Copies of the pages from the GSeqEdit database which report the cloning, sequencing and functional data for the PRO213 polypeptide sequence, including its homology to human gas6, as well as the cloning, and sequencing data for the nucleic acid sequence encoding the PRO213 polypeptide are attached to this declaration (with the dates redacted) as Exhibit A. PRO213 comprises the amino acid sequence of residues 35-273 of SEQ ID NO: 506 as claimed in the present invention.

10. The GSeqEdit report shows the full-length nucleic acid sequence for DNA30943-1106 (identified as "DNA30943") and the full-length PRO213 polypeptide encoded

2

by DNA30943. Both the DNA30943 and the PRO213 polypeptide sequences and the homology of PRO213 to human gas6 were obtained prior to June 18, 1997.

11. The DNA sequence of nucleotides 498 to 1216 of the DNA 30943 sequence shown in the GSeqEdit report is identical to that of nucleotides 500-1222 of SEQ ID NO:505 disclosed in the above-identified application.

12. The beginning of the cDNA sequence corresponding to nucleotides 500-1222 of SEQ ID NO:505 in the above-identified application is shown on page 6 of the GSeqEdit database report. The location of nucleotide 500 of SEQ ID 505 is marked with an arrow. The location of the nucleotide 1222 of SEQ ID NO:505 is shown on page 12 and is marked with an arrow.

13. The sequence of amino acid residues 54 to 295 of PRO213 polypeptide shown in the GSeqEdit report is identical to that of amino acids 35-273 of SEQ ID NO: 506 disclosed in the above-identified application.

14. The amino acid residues 35 to 273 of SEQ ID NO: 506 are shown in the GSeqEdit report starting on page 6 and continuing until page 12 of the report.

15. Exhibit A clearly shows that both the amino acid sequence of amino acids 35 to 273 of SEQ ID NO: 506 and the nucleotide sequence encoding thereof disclosed in the above-identified application, as well as the homology of the claimed polypeptide to human gas 6 were obtained prior to **June 18, 1997**.

16. We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information or belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issued thereon.

_____   _____
Audrey Goddard   Date

_____   _____
Paul J. Godowski, Ph.D.   Date

3

_____   _____
Austin Gurney, Ph.D.   Date

_____   _____
William I. Wood, Ph.D.   Date

SV 2065805 v1
10/4/04 12:26 PM (39780.2630)

```
                                                  scrFI[M.hpaII-]
                                                  nciI
                                                  mspI
                                                  hpaII    mnlI
                                                  dsaV   sau3AI  rmaI
                                                  bssKI  mboI/ndeII[dam-]
                                                  xmaI/pspAI    maeI
sau96I[dcm-]                                      snaI    dpnII[dam-]
avaI[dcm-]                                        scrFI[M.hpaII-]
scrFI[dcm-]                                       nciI    dpnI[dam+]
pspGI                   dsaV  nlaIV  xbaI   sau3AI  taqI              hgaI
mvaI                    tsp509I[M.ecoRI-]  bfaI  mboI/ndeII[dam-]      thaI    mwoI
ecoRII[dcm-]            ecoRI  bssKI  bstYI/xhoII  dpnII[dam-]         fnuDII/mvnI    sau96I[M.ha
dsaV[dcm-]             apoI  bsaJI  bamHI  hpyI88III  mnlI             bstUI  bglII[M.haeIII-]  bce
bstNI       mnlI       taqI[M.claI-?] bsaJI  alwI[dam-]  dpnI[dam+]    drdI    bsh1236I  mwoI   hpyCH4
bssKI[dcm-] hpyCH4V    claI/bsp106   avaI/bsp106  alwI[dam-]           mluI  eciI   cac8I  bsgI
apyI[dcm+] bsgI bsaJI  bspDI[dam-]  bsaJI  alwI[dam-]  bstYI/xhoII  mnlI    aflIII  aciI  aluI  haeIII/pal
1 CCAGGTCCAA CTGCACCTCG GTTCTATCGA TTGAATTCCC CGGGGATCCT CTAGAGATCC CTCGACCTCG ACCCACGGGT CCGCCAAGCT CCGCCTGCAC GGCCCTGCAC
  GGTCCAGGTT GACGTGGAGC CAAGATAGCT AACTTAAGGG GCCCCTACGA GATCTCTAGG GAGCTGGAGC TGGGTGCCCA GGCGGTTCGA GGCGGACGTG CCGGGACGTG
```

```
                                             xcnI
                                          scrFI[dcm-]
                                          pspGI    bsrI          sau96I[M.haeIII-]
                              scrFI[dcm-]  mvaI   haeIII/palI    nlaIV
                              pspGI        ecoRII[dcm-]          haeIII/palI
                              mvaI  bspMI  dsaV[dcm-]            ecoO109I/draII
                              ecoRII[dcm-] bstNI  eaeI           mnlI
                              dsaV[dcm-]   bssKI[dcm-]           ddeI            sau96I
                              bstXI[M.haeIII-] hpy188III         bspCNI  bslI    avaII
                mwoI          bstNI        eco81I  banI  mnlI    cfrI    eco81I bslI   nlaIV
                hpyCH4V       bssKI[dcm-]  bsu36I/mstII/sauI     fnu4HI/bsoFI bsu36I/mstII/sauI   rmaI
        tse..   nlaIV         apyI[dcm+]   haeIII/palI   bslI    aciI  tspRI  haeIII/palI         maeI
        fnu4HI/bsoFI          haeIII/palI  sau96I[M.haeIII-] bpmI/gsuI[dcm-] sau96I[M.haeIII-]    bfaI
        bbvI    mnlI
:01 GGCTGCAAGG GAGGCTCCTG TGGACAGGCC AGGCAGGTGG GCCTCAGGAG GTGCCTCCAG GCGGGCCAGTG GGCCTGAGGC CCCAGCAAGG GGGCTCGTTCC GCAGGTCC
    CCGACGTTCC CTCCGAGGAC ACCTGTCCGG TCCGTCCACC CGGAGTCCTC CACGGAGGTC CGCCCGGTCAC CCGGACTCCG GGGTCGTTCC CGATCCCAGG
```

scrFI[M.hpaII-]

nciI

sau96I[dcm-]

bspI286

```
                                          bsryI
                            nscI/balI
               scrFI[dcm-]             eae I           banII          scrFI[dcm-]
               pspGI                   nlaIII          scrFI[dcm-]    pspGI    nspI
               mva I          mwoI styI                pspGI          mvaI   hpaII
               ecoRII[dcm-]   bglI[M.haeIII-]  mvaI                   ecoRII[dcm-]
               dsaV[dcm-]     eae:   ncoI[M.haeIII-]  mwoI            dsaV[dcm-]
               bstNI          cfrI   dsaI    ecoRII[dcm-]   sfaNI     bstNI  dsaV
               bssK:[dcm-]    fnu4HI/bsoFI    dsaV[dcm-]     mwoI     bssKI[dcm-]
               apyI[dcm+]     aciI   btgI/bstDSI bstNI   tseI         bsII[dcm-]
     bsmFI              mspAlI/nspBII haeIII/palI nlaIV  mwoI   tseI   apyI[dcm+]. mnlI     sau96I[M.ha
     bsrI bsaJI         tseI sfiI bsaJI     bssKI[dcm-] fnu4HI/bscFI   bsiI avaII[dcm-][M.hpaII-]  bslI
     bslI[dcm-]         fnu4HI/bsoFI  cfrI   bsaJI bpmI/gsuI[dcm-] fnu4HI/bsoFI bssKI   nlaIV  bsl
     bpmI/gsuI[dcm-;    bbvI haeIII/palI bslI  apyI[dcm+] bbvI   bbvI bsaJI  bsaJI   mwoI  haeIII/palI
20: ATCCCCAGTC CCAGGACACA GCACCGGCCA CCATGGCCAC GCCTGGGCTC CAGCAGCATC AGCAGCCCCC AGGAGCCGGG AGGCACAGGT GGCCCCCACC
    TAGAGGTCAG GGTCCTGTGT CGTCGCCGGT GGTACCGGTG CGGACCCGAG GTCGTCGTAG TCGTCGGGGG TCCTCGGGGG TCCTGTGTCCA CCGGGGGTGG
```

deleted a G -goddard 6/8/98^

GSeqEdit, DNA30943 [Full], page 3

```
                                                    scrFI[dcm-]
                                   scrFI[dcm-]      pspGI
                          alu:     pspGI            mval
                   mrlI   alwNI[dcm-]  mval         ecoRII[dcm-]
                   bseR:  alw26I/bsmAI scrFI[M.hpaII-]  ecoRII'dcm-]  dsaV'dcm-]
           mspI    tseI               nciI      acII  haeIII/palI  bstNI
           hpaII   mwoI               mspI      ecII dsaV[dcm-]  bssKI[dcm-]
           scrFI[M.hpaII-]            hpaII          mnlI bstNI  apyI[dcm+]
           nciI    fnu4HI/bsoFI bslI dsaV      tfiI ecoNI bssKI[dcm-]  bslI
           dsaV    bstAPI   bslI bssKI fokI bsaXI  bseRI  apyI[dcm+]  mnlI  acII  mnlI  haeIII/
           bssKI   bbvI     bslI bsaJI bstF5I hinfI bslI[dcm-] bslI  bseRI  haeIII/palI bpmI/gsuI[dcm-];
       301 ACCCGGAGGA GCAGCTCCTG CCCCTGTCCG GGGGATGACT GATTCTCCTC CGCCAGGCCA CCCAGAGGAG AAGGCCACCC CGCCTGGAGG CACAGGCCAT
           TGGGCCTCCT CGTCGAGGAC GGGGACAGGC CCCCTACTGA CTAAGAGGAG GCGGTCCGGT GGGTCTCCTC TTCCGGTGGG GCGGACCTCC GCGTCCGGTA
         1       M  T  D  S  P  P  P  G  H  P  E  E  K  A  T  P  P  G  G  T  G  H
         1                                                                       M
                                                                         Correct ORF^
```

GSeqEdit, DNA30943 [Full], page 4

```
                                                              bceAI
                                                              haeIII/palI
                                                              mcrI
                                                              eagI/xmaIII/eclXI
                                                              eaeI
                                                              cfrI
                                                              bsiEI
                                                              mspI[M.haeIII-]
                                                              hpaII
                                                              scrF-[M.hpaII-]        bsp
                                                              nciI                   bmy
                                                              dsaV                   ban
                                           cac8I              bsaKI                  scrFI
                                           hgiAI/aspHI        sau96I[M.haeIII-]      nciI
                                           bsp1286            haeIII/palI            mspI
                                           bsiHKAI            mspI[M.haeIII-]        hpaII
                       tspRI  fnu4HI/bsoFI  hpaII bslI                               dsaV
                       btsI   aciI  bbvI    cfr10I/bsrFI      nmoI bssKI

bsp1286         nmoI
bmyI ddeI  mnlI tseI
banII hpy188III fnu4HI/bsoFI
mnlI  bspCN-    bbvI
401 GAGGGGCTC- CAGGAGGTGC TGCCTGATGTG GCTTCTGGTG TTGGCAGTGG GCGGGACAGA GCACGCCTAC CGGCCCGGCC GTAGGGGTGTG TGCTGTCCGG
    CTCCCCGAGA GTCCTCCACG ACGGACTACAC AACCGTCACC CGCCGTGTCT CGTGCGGATG GCCGGGCCGG CATCCCACAC ACGACAGGCC

23 E  G  L  S  G  G  A  A  D  V  A  S  G  V  G  S  G  R  H  R  A  R  L  P  A  R  P  Q
 2  R  G  S  Q  E  V  L  M  W  L  L  V  L  A  V  G  G  T  E  H  A  Y  R  P  G  R  R  V  C  A  V  R

                                            deleted a T -goddarda 6/8/98^

                                            deleted C -goddarda 6/8/98^
```

```
      bsaXI
      tth111I/aspI
      pflFI                                      tseI
      sau96-                          scrFI[M.hpaII-]
      nlaIV                              nciI    fnu4HI/bsoFI
      avaII                             nsp-     bbvI
                                        hpaII    hpyCH4V
      sanDI            tseI
      ppuMI            fnu4HI/bsoFI              rlaIV   cac8I
      nlaIV            bbvI                      banI    haeIII/palI
      eco0109I/draII   hpyCH4V    rsaI      hpy99I   csaV   sfcI
      bsmFI   bsrAI    hinfI   bsgI   csp6I   hphI   bslI   bsp1286 sau96I[M.haeIII-]
                                              mnlI   bspMI   bmyI   bssKI   pstI[M.H1-]    bslI

501 GCTCACGGGG ACCCTGTCTC CGAGTCGTTC GTGCAGCGTG TGTACCAGCC CTTCCTCACC ACCTGCGACG GGCACCGGGC CTGCAGCACC TACCGAACCA
    CGAGTGCCCC TGGGACAGAG GCTCAGCAAG CACGTCGCAC ACATGGTCGG GAAGGAGTGG TGGACGCTGC CCGTGGCCCG GACGTCGTGG ATGGCTTGGT

35  A  H  G  D  P  V  S  E  S  F  V  Q  R  V  Y  Q  P  F  L  T  T  C  D  G  H  R  A  C  S  T  Y  R  T  I
```

```
                                                                    sau96
                                              stuI[dcm-]            nlaIV
                              scrFI[dcm-]     scrFI[dcm-]           scrFI[dcm
                 pspGI                        pspGI                 pspGI
                 nvaI          ecoRII[dcm-]   nvaI                  mvaI haeI
                 ecoRII[dcm-]  dsaV[dcm-]     ecoRII[dcm-]   thaI   nspI      ecoRII[dc
scrFI[dcm-]      dsaV[dcm-]    bstNI          dsaV[dcm-]     fnuDII/mvnI hpaII dsaV[dcm-]
pspGI            bstNI         bssKI[dcm-]    bsII           bstUI tseI scrFI[M.hpaII-]  bstNI
nvaI             bsII          bsII                          bsh1236I  ncII  sau96I     bssKI[dcm
ecoRII[dcm-]     tseI bsaJI    sau96I[M.haeIII-]             mluI mwoI dsaV   avaII cac8I
dsaV[dcm-]       fnu4HI/bsoFI  nlaIV   bssKI[dcm-]           fnu4HI/bsoFI     mnII  aciI  bsaJI mwo
bstNI      aciI  bsaJI         haeIII/palI haeIII/palI                        mnII  aciI  mspAII/nspBII ecoO10
bssKI[dcm-]      fnu4HI/bsoFI  cac8I   apyI[dcm+]            aflIII bbvI bssKI  mboII             apyI[dcm+
bsII       sau96I              apyI[dcm+] mnII mwoI cac8I    bsaJI             earI/ksp632I

aciI avaII  aciI bbvI apyI[dcm+] bsII[dcm-] mnII mwoI cac8I bsaJI
sfcI avaII
601 TCTATAGGAC CGCCTACCGC GGCTGGCCCC CCGCAGCCCG GGCTGGCCCT CGCTACGCGT GCTGCCCCGG CTGGAAGAGG ACCAGCGGGC TTCCTGGGGC
    AGATATCCTG GCGGATGGCG CCGACCGGGG GGCGTCGGGC CCGACCGGGA GCGATGCGCA CGACGGGGCC GACCTTCTCC TGGTCGCCCG AAGGACCCCG
69  Y  R  I  A  Y  R  R  S  P  G  L  A  P  A  R  P  R  Y  A  C  C  P  G  W  K  R  T  S  G  L  P  G  A

^edit T to C, does not change aa -goddarda 6/9/98
```

tseI

mwoI

mwoI

fnu4HI/bsoFI

haeIII/palI

eaeI[dcm-]

cfrI fnu4HI/bsoFI

scrFI[dcm-]   hpyCH4V

pspGI bbvI tseI sfcI

mvaI mspAII/nspBII pstI

ecoRII[dcm-]   fnu4HI/bsoFI

dsaV[dcm-]   bbvI sse8387I

bstNI aciI mspAII/nspBII   tsp45I

bssKI[dcm-] aciI   sbfI fckI aciI maeIII

apyI[dcm+] fnu4HI/bsoFI bstF5I hphI   bs

tseI
fnu4HI/bsoFI   fnu4HI/bsoFI
bbvI   cac8I aciI   hpaI: mnlI aluI   mspI
                                                                              nlaIII

701 CTGTGGAGCA GCAATATGCC AGCCGCCATG CCGGAACGGA GGGAGCTGTG TCCAGCCTGG CCGCTGCCGC TGCCCTGCAG GATGGCGGGG TGACACTTGC
    GACACCTCGT CGTTATACGG TCGGCGGTAC GGCCTTGCCT CCCTCGACAC AGGTCGGACC GCGGACGGCG ACGGGACGTC CTACCGCCCC ACTGTGAACG

102 C G A A I C Q P P C R N G G S C V Q P G R C R C P A G W R G D T C

tseI
fnu4HI/bsoFI
bbvI   alwNI[dcm-]
hinPI afaNI   mspI
hhaI/cfoI   hpaII   nlaIV
fnu4HI/bsoFI haeII hpyCH4V   naeI/ngoMI bsrI
aciI bsmFI afeI/eco47III   cfr10I/bsrFI banI tspRI   bspi286

                              cac8I naeIII bsrI   bmyI
bsmI tspRI mnlI   aciI alw26I/bsmAI bslI   mnlI
fckI btsI mae: hpyCH4V bfaI

hpy188I bstF5: hpyCH4V bfaI

801 CAGTACAGATG TGGATGAATG CAGTGCCAGG AGGGGGGCT GTCCCCAGCG CTGCATCAAC ACGGCCGGCA GTTACTGGTG CCAGTGTTGG GAGGGGCACA
    GTCAGTCTAC ACCTACTTAC GTCACGGTCC TCCCCCCGA CAGGGGTCGC GACGTAGTTG TGGCGGCCGT CAATGACCAC GGTCACAACC CTCCCGTGT

135 Q S D V D E C S A R R G G C P Q R C I N T A G S Y W C Q C W E G H S

GSeqEdit, DNA30943 [Full], page 8

```
                                                                                                          alw
                                                                                                          alw
                                                                                                 bsrDI    mwcI
                                                                                              hpyCH4V      bstA
                                                                                    tspRI     mboII        hpyCH
                                                                                    bst4CI/hpyCH4III       bsgI

                        scrFI[dcm-]
                        pspGI
                        mvaI
                        ecoRII[dcm-]
                        dsaV[dcm-]
                        bstNI
                        sau96I[M.haeIII-]
                        nlaIV   bssKI[dcm-]
                        haeIII/palI
                        sau96I[M.haeIII-]
                        pspOMI/bsp120I
                        nlaIV   bsaJI
                        eco0109I/draII
                        bsp1286I[M.haeIII-]
                                styI    bmyI    apyI[dcm+]
                                bslI    banII[M.haeIII-]
                        draII-          apaI    bsaJI   sau96I[M.haeIII-]
hpyCH4V  rsaI           bspi286         eco0109I/draII  nlaIV
sfcI     csp6I          bny- bsaJI      mnlI    bslI    haeIII/palI
pstI     bst4CI/hpyCH4III bslI

901 GCCTGTCTGC AGACGGTACA CTCTCGTGTC CCAAGGGAGG GCCCCCCAGG GTGGCCCCCA ACCCGACAGG AGTGGGACAGT GCAATGAAGG AAGAAGTGCA
    CGGACAGACG TCTGCCATGT GAGACACACG GGTTCCCTCC CGGGGGGTCC CACCGGGGGT TGGGCTGTCC TCACCTGTCA  CGTTACTTCC TTCTTCACGT
169  L  S  A  D  G  T  L  C  V  P  K  G  G  P  P  R  V  A  P  N  P  T  G  V  D  S  A  M  K  E  E  V  Q
```

```
                    tsei
      scrFI[dcm-]   nwoI
      pspGI         fnu4HI/bsoFI
      mvaI          bstAPI                                              sa
      ecoRI-[dcm-]           scrFI[dcm-]                                mspI
      dsaV[dcm-]    bbvI                                                scrFI
      bstNI         hpyCH4V     sau96I[M.haeIII-]  haeIII/palI          nciI
                    sfcI        nlaIV       pspGI      cacBI            nciI
      s*cI  bssKI[dcm-]         pstI[M.aluI-][M.H1-]        mvai bglII(M.haeIII-]  nlaIV  nl
      pstI[M.H1-]       ecoNI    tseI aluI[M.pstI-]   hpyCH4V eccRII[dcm-]   bpmI/gsuI[dcm-] hpaI
      tseI  bsaJI     bspMI     fnu4HI/bsoFI  haeIII/palI    dsaV[dcm-]      bsrI     bsp1286 av
      fnu4HI/bsoFI-   sau96I    mnlI    bbvI pvuII[M.H1-]   bsgI  bstNI mnlI alwNI[dcm-]    bmyI dsaV
      bbvI  apyI[dcm-] nslI bseRI    aluI[M.pstI-] cac8I   tspRI   bssKI[dcm-]      tspRI   banII bslI
      mnlI hpyCH4V    avaI*   bpmI/gsuI[dcm-]  mspAII/nspBII  btsI  apyI[dcm+] alw26I/bsmaI nlaIII    bssKI
100: GAGGCTGCAG TCCAGGGTGG ACCTCCTGCA GGAGAAGCTG CAGCTGGTGC TGGCCCCACT GCACAGCCTG GCCTCGCGAGG CACTGGAGCA TGGGCTCCCG
     CTCCGACGTC AGGTCCCACC TGGAGGACGT CCTCTTCGAC GTCGACCACG ACCGGGGTGA CGTGTCGGAC CGGAGCGTGA CGTGACCTCGT ACCCGAGGGC
202  R  L  Q   S  R  V  D    L  E  E  K  L    Q  L  V  L    A  P  L   H  S  L    A  S  Q  A    L  E  H   G  L  P
```

```
                 bglAI/aspEI
                 bsp1286
                 bsiHKAI
                 bmyI
                 scrFI[dcm-]
            tseI pspGI
            fnu4HI/bsoFI                           mnlI
            bbvI  nvaI hpyCH4V         aciI        bseRI
       mspI  ecoRII[dcm-]          fnu4HI/bsoFI    bpmI/gsuI[dcm-]
       hpaII  dsaV[dcm-]           ncrI  pleI      scrFI[dcm-]        sau96I
       scrFI[M.hpaII-] apaLI/snoI  eagI/xmaIII/eclXI   pspGI  tseI   avaII
       nciI  bstNI                 eaeI  mlyI      nvaI   fnu4HI/bsoFI
       dsaV  bssKI[dcm-]           aluI haeIII/palI    cac8I   ecoRII[dcm-]   ppuMI
       bssKI  apyI[dcm-]           tseI cfrI  hinfI[M.taqI-]   dsaV[dcm-] pvuII[M.H:-]
       bsaJI  mnlI  alw44I/snoI    fnu4HI/bsoFI  taqI  ddeI    bstNI  bbvI  nlaIV
                                   bbvI bsiEI sfaNI  bspCNI    bssKI[dcm-] aluI ecoO109I/dr
                                                              apyI[dcm+] mspAlI/nspBII

1101 GACCCCGGCA GCCTCCTGGT GCACTCCTTC CAGCAGCTCG GCCGCATCGA CTCCCTGAGC GAGCAGATTT CCTTCCTGGA GGAGCAGCTG GGGCCTGCT
     CTGGGGCCGT CGGAGGACCA CGTGAGGAAG GTCGTCGAGC CGGCGTAGCT GAGGGACTCG CTCGTCTAAA GGAAGGACCT CCTCGTCGAC CCCAGGACGA
235   D   P   G   S   L   L   V   H   S   F   Q   Q   L   R   I   D   S   L   S   E   Q   I   S   F   L   E   E   Q   L   G   S   C   S
```

```
                                                    scrFI[dcm-]
                                                    pspGI
                                                    mval
                                                    ecoRII[dcm-]
                                                    dsaV[dcm-]                       tseI
                                             bstNI          mwoI                     fnu4HI/bsoFI
                              hpy188III      bslI   bsp1286                          bbvI                    nlaIII      hpyI
                   bssSI           mwoI bssKI[dcm-] bmyI             hpyCH4V                                 nspHI       sau96I
                   p.eI tsp45I     hinPI apyI[dcm+] banII           sfcI                                     bstXI       avaII
                   miyI maeIII     hhaI/cfoI  ddeI          aclI pstI[M.H1-]                                 mwoI nspI   nlaIV
         hpyCH4V   hinfI           haeII bsaJI bspCNI mnlI  fnu4HI/bsoFI     nlaIII
    1201 CCTGCAAGAA AGACTCGTGA CTGCCCAGCG CCCCAGGCTG GACTGAGCCC CTCACGCCGC CCTGCAGCCC CCATGCCCCT GCCCAACATG CTGGGGGTCC
         GGACCGTTCTT TCTGAGCACT GACGGGTCGC GGGGTCCGAC CTGACTCGGG GAGTGCGGCG GGACGTCGGG GGTACGGGGA CGGGTTGTAC GACCCCCAGG
     269 C    K    D    S    Q
```

```
                                                                    scrFI[dcm-]
                                                                    pspG?
                                                                    mval
                                                                    ecoRII[dcm-]
                                                                    dsaV[dcm-]
                                       scrFI[dcm-]                  bstNI
                                       pspGI   haeIII/palI          bssKI[dcm-]
                                       mval    sau96I[M.haeIII-]    bslI[dcm-]
                                       ecoRII[dcm-]                 apyI[dcm+]
                      scrFI[dcm-]      dsaV[dcm-]      earI/ksp632I
                      pspGI  haeIII/palI               bstNI ecoO109I/dralI            hpy188III         bsl?
                      mval   sau96I[M.haeIII-]         bssKI[dcm-]     mnlI   bseRI     mnlI    bsaJI
                      ecoRII[dcm-]                     apyI[dcm+]      bseRI  mnlI  bslI avaI  nlaIV  alwNI[dcm-]
            ava?      dsaV[dcm-]      earI/ksp632I     haeIII/palI  mnlI mboII mnlI bslI bsaJI mnlI   alw26I/bsmAI  fokI
   mnlI     tsp45I  ac:I                                                                                  pflMI[dcm-]  bstF5I
   bsaJI    maeIII bsrBI                                                                                   bslI[dcm-]  nlaIII
   bs:I     hpaI pspCNI
1301 AGAAGCCACC CCGGGGTGAC CGAGCGGAAG GCCAGGCAGG GCCTTCCTCC TCTTCCTCCT CCCCTTCCTC CGGAGGCTCC GGGAGGCTCC GCATGGGATG
     TCCTCGGTGG AGCCCCACTG ACTCGCCCTC CGGTCCGTCC CGGAAGGAGG AGAAGGAGGA GGGGAAGGAGG CCCTCCGAGG GGTCTGGGAC CGTACCCTAC
                                                          ^edit T to C -goddara 6/8/98
                                                               ^deleted a C -goddara 6/8/98
                                          edit G to C -goddarda 6/8/98^
```

GSeqEdit, DNA30943 [Full], page 13

sau96I[M.haeIII-]
haeIII/palI
sau96I[M.haeIII-]
pspOMI/bsp120I
nlaIv

scrFI[dcm-]

pspGI ecoO109I/draII
mval bsp1286I[M.haeIII-]
ecoRII[dcm-]

dsaV[dcm-]
bstNI bmyI ddeI[M.aluI-]
bssKI[dcm-] bspCNI

mwoI barII[M.haeIII-]
sfiI[dcm-] pvuII
foxI styI bglII[M.haeIII-] mspAlI/napBII
bstF5I haeIII/palI ddeI[M.aluI-]
sfaNI bslI[dcm-] apaI bspCNI mnlI
bceAI bsaJI apyI[dcm+] mnlI aluI

nlaIv
kpnI
banI
asp718
scrFI[dcm-]
pspGI
mval rsaI
ecoRII[dcm-]
dsaV[dcm-]
bstNI
bssKI[dcm-]
bsaJI
apyI[dcm+] bslI bsaJI csp6I
bslI[dcm-] acc65I

scrFI[dcm-]
pspGI
mval
ecoRII[dcm-]
dsaV[dcm-]
bstNI
bssKI[dcm-]
apyI[dcm+] bslI bsaJI csp6I
bsaJI

mboII
sau3AI
mboI/ndeII[dam-]
dpnII[dam-]
dpnI[dam+]
bstYI/xhoII tfiI
alwI[dam-] hinfI

ss
sa
cg
ec
bs
bs
bm
ba
bcg
rsaI
csp6I

:401 GGCTGGGATC TTCTCCTGA ATCCACCCCT GGCTACCCCA ACCCTGGGTA ATCCCAAGGC CAGGTGGGCC CTCAGCTGAG GGAAGGTACG
CCGACCCTAG AAGAGACACT TAGGTGGGGA CCGATGGGGG TGGGACCCAT GGGGTTGCCG TAGGGTTCCG GTCCACCCGG GAGTCGACTC CCTTCCATGC

^edit T to C -goddarda 6/8/98

^edit T to C -goddarda 6/8/98

^edit T to C -goddarda 6/9/98

```
            sau96I
            nlaIV
            avaI
            sanDI
            ppuMI
            nlaIV                                      mspI
            ecoO109I/draII              tseI hpaII
            scrFI[dcm-]                 fnu4HI/bsoFI
            pspGI     nlaIII            bbvI scrFI(M.hpaII-)
            mvaI     styI         scrFI[dcm-]                         tspRI
            ecoRII[dcm-]          pspGI   nciI                        tdeI
            dsaV[dcm-]            mvaI    dsaV              mnlI       tseI
            bstNI   ncoI          ecoRII[dcm-]             bslI       fnu4HI/bsoFI
            bssKI[dcm-]           dsaV[dcm-]               haeIII/palI     tseI
            bsaUI   dsaI          bstNI   bssKI            sau96I[M.haeIII-]  bbvI
            apyI[dcm+]            bssKI[dcm-]  mnlI         nlaIV bspCNI      fnu4HI/bsoFI
       nlaIV bsmFI btgI/bstDSI   apyI[dcm+]  bsaXI         ecoO109I/draII    bbvI
   aluI bpmI/gsuI[dcm-] bsaUI    haeIII/palI bslI

1501 AGCTCCCTGC TGGAGCCTGG GACCCATGGC ACAGGCCAGG GCTGGGTGG GCCTCAGTGG GGGCTGCTGC CTGACCCCCA GCACAATAAA
     TCGAGGGACG ACCTCGGACC CTGGGTACCG TGTCCGGTCC GTCGGGCCTC CGACCCACCC CGGAGTCACC CCCGACGACG GACTGGGGGT CGTGTTATTT

          ^edit T to C -goddarda 6/8/98
             ^deleted a C -goddarda 6/8/98
```

```
                                                                    rmaI
                                                                    naeI
                                                                    pleI
                                                              aciI nlyI
                                                              fnu4HI/bsoFI                        sa
                                                              haeIII/palI                       styI
                                                              mcrI  hinfI    taqI                aciI  ha
                                                              eagI/xmaIII/eciXI saiI  hpyCH4V    mwoI nlaII
                                                              eaeI  thaI xbaI pleI   sfcI        fnu4HI/bso
                                                              cfrI fnuDII/nvnI hincII/hindIII[M.taqI-]  sfiI ncoI[M
                                                              bsiEI drdI  nlyI  pstI    eaeI     dsaI
                                                              notI bstUI hpy188III bspMI  cfrI   btgI/b
                                                              fnu4HI/bsoFI bfaI  accI[M.taqI-] aluI haeIII/palI  bsaJI
                                                              aciI bsh1236I  hinfI[M.taqI-] hindIII bglII[M.hae
      tail
      naeII/hpyCH4IV
1601 AATGAAACGT GAAAAAAAAA AAAAAAAAA AAAAAAAAA AAAGGGCGGC CGGCGACTCTA GAGTCGACCT GCAGAAGCTT GGCCGGCCATG
     TTACTTTGCA CTTTTTTTTT TTTTTTTTT TTTTTTTTT TTTCCCGCCG GCCGCTGAGAT CTCAGCTGGA CGTCTTCGAA CCGGCCGGTAC

              aluI
              tseI
              fnu4HI/bsoFI
              bbvI  psiI
              hpyCH4V      maeIII
1701 GCCCAACTTG TTTATTGCAG CTTATAATGG TTACAAAT
     CGGGTTGAAC AAATAACGTC GAATATTACC AATGTTTA


> length: 1738


acc65I (GGTACC):                           1447


GSeqEdit, DNA30943 [Full], page 16
```

⦿ Find ○ New ○ Update

[SELECT ▾] [   ] [GO]

DNA30943

DNA Info Project DNA28735

Is Primarydna ▢

Source Info 187 FLS 339   LIB25   RNA22   SRC18   Human Fetal Lung

Gene Info PRO213 Human Egfl7 (VEMF) Non-Secreted UNQ187

Gene Annotation

Genome Mapping Run Geode

Affy HGU133A 218825_at
HGU133P 218825_at
HGU95C 48695_at
Hu35KA R39467_f_at
Hu35KC RC_N74688_f_at
Hu35KD RC_N70081_at
HuGenen1 NM_016215_at
MOE430A 1421335_a_at, 1435823_x_at, 1451427_a_at, 1451428_x_at
MOE430P 1421335_a_at, 1435823_x_at, 1451427_a_at, 1451428_x_at
Rat230v2 1370402_at, 1374570_at, 1393427_s_at

Agilent H1Av2 A_23_P123785
H1A A_23_P123785
H1Av2 A_23_P123785
H1B A_32_P210642, A_32_P300230
M1A A_51_P315841
WHG A_32_P210642

FANTOM Mouse:0610012G11

GenBank Human:AB125649, AF186111, AL512735, AY358901, AY358902, AY358903, BC012377
Mouse:AF184973, AK002601, AY239289, AY239290, AY309459, BC024610

GeneHub Human:GENE7437
Mouse:MGENE1470

INCYFL Human:931424.FL1_0, 931424.FL3_0

Incyte Human:416842.1, 416842.13, 416842.17, 416842.56, 416842.58, 416842.62, 416842.64, 416842.67, 416842.68
416842.69, 416842.70, 416842.72, 416842.74, 984053.1

LocusLink Human:51162
Mouse:353156

MGI Mouse:2449923

OMIM Human:608582

Proteome Human:NP_958854.1
Mouse:NP_942017.1

RefSeq Human:NM_016215, NM_201446
Mouse:NM_178444, NM_198724, NM_198725

UniGene Human:Hs.91481
Mouse:Mm.268933

General Info

Lab Name	28735.2	Insert (Digest) Size(bp)	1600
Insert Name	undeterminated	Reverse Size(bp)	1
Generated By	Full Length Screen	Internal Size(bp)	239
Type of DNA	FLS	Cut Size(bp)	
Insert ID	Novel	Vector	
Action	Drp Not FL	Interest	not reviewed
Concentration		Origene Cloneid	
Origene Plate		Origene Well	

Construct Info

Tag	–	Exp System	
Bases to Sequence		Sequence Status	

Antibody Info No antibody info

Other Info ☐ In Situ image available   ☐ TaqMan Hit   ☐ Transgenic Animal Model

OLI5288	
OLI5289	
OLI5290	
OLI5572	30943.f1
OLI5573	30943.f2
Oligos OLI7839	30943.tm.f1
OLI7840	30943.tm.r1
OLI7841	30943.tm.p1
OLI7845	30943.tm.f3
OLI7846	30943.tm.r3
OLI7847	30943.tm.p3

Comments

Login	Date Entered	Annotation
dtb	~~~~~~	homolog to an unknown human protein and to gas6. The mouse protein with 40 % identity clearly has a signal sequence wheras this clone does not. I think the clone is suspect.-ALG
goddarda	~~~~~~	Sequencing in clone 64908 allowed us to correct three sequencing errors in 30943 which lie in the 5' UTR of the gene. However the presence of these errors caused us to identify the wrong 5' end of the ORF in the gene. -goddarda
goddarda	~~~~~~	Sequence was flagged as poor quality during proofreading. Tried to rerun reactions with Big DYE chemistry, but too little DNA - signal unreadable. Requested more DNA 2/98. Never received -goddarda
goddarda	~~~~~~	amplifiedcolon tumors and to a lesser extent in lung tumors- TaqMan assay
jean	~~~~~~	Clone 30943 from plasmid inventory plate is verified correct through partial sequencing

Legal Status No legal status

Status			
Scientist	Daryl Baldwin	**Date Entered**	~~~~~~
Notebook	0	**Date Updated**	February 14, 2003
Page		**Date Completed**	
Storage Location		**Date Canceled**	
Box		**Cancel Reason**	
Slot		**Clone Status**	not reviewed
Inventory Status		**Sequence Status**	

Others   ☐ Sent to pLASMID Archive
         ☐ Clone Verified

Project Member
No Project member generated

FLS FLSDNA
No FLS, FLSDNA generated

Exp Construct

EXP	Lab Name	Construct DNA	System
EXP7559	Protein Engineering	DNA346527	Baculovirus

ABI

ABI Run.Lane	Date Sequenced	ABI Plate
ABI512.31	04/07/1997	
ABI512.32	04/07/1997	
ABI512.33	04/07/1997	
ABI512.34	04/07/1997	
ABI512.35	04/07/1997	
ABI812.30	10/06/1997	
ABI812.31	10/06/1997	
ABI1055.40	02/10/1998	
ABI1055.41	02/10/1998	
ABI2530.13	02/11/2000	1252

MA Plate

MA Plate	Well Num	Well Location	Date	Tyep Plate
PLT129	25	C1	08/11/1999	Inventory

Print Run
No Print run generated

XPT